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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/643,310	08/19/2003	Daniel E. Brueske	SC12789TH	4213
20576	7590	08/16/2005	EXAMINER	
MILLER JOHNSON SNELL CUMMISKEY, PLC 800 CALDER PLAZA BUILDING 250 MONROE AVE N W GRAND RAPIDS, MI 49503-2250			SHINGLETON, MICHAEL B	
			ART UNIT	PAPER NUMBER
			2817	

DATE MAILED: 08/16/2005

Please find below and/or attached an Office communication concerning this application or proceeding.



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APPLICATION NO./ CONTROL NO.	FILING DATE	FIRST NAMED INVENTOR / PATENT IN REEXAMINATION	ATTORNEY DOCKET NO.
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EXAMINER
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ART UNIT	PAPER
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20050725

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Commissioner for Patents

Enclosed is an examiner's amendment to the independent claims.

*ENC PTOL-FRZ*

*Michael B Shingleton*  
**MICHAEL B SHINGLETON**  
**PRIMARY EXAMINER**  
**GROUP ART UNIT 2017**

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

At the end of the independent claims the following was added: "wherein the output current of the first and second current amplifiers vary in proportion to variations in the input current to the first and second amplifiers.

Authorization for this examiner's amendment was given in a telephone interview with Mr. Frank M. Scutch, III on July 25, 2005.

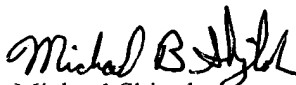
The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Nishikido 6,803,831 (Nishikido) discloses a ring oscillator arrangement wherein Nishikido is silent on the amount of current out of inverter CSI compared to the amount of current in. An inverter is a voltage device. Furthermore, the arrangement of Nishikido is not even a VCO delay cell in that there is no description of a voltage that controls the frequency of the oscillator.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael B. Shingleton whose telephone number is (571) 272-1770.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Pascal, can be reached on (571)272-1769. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

MBS  
July 25, 2004

  
Michael Shingleton  
Primary Examiner  
Group Art Unit 2817